

**Amendments to the Specification:**

Please amend the paragraph at page 5, line 29 to page 6, line 11 as follows:

However, the objective lens of a microscope is generally manufactured so as not to have chromatic aberration, and hence for the reason described above, the focal position 133 of the detecting light is almost exactly the same as the position of the thermal lens 131 formed at the focal position 132 of the exciting light (FIG. 4B). Changes in the refractive index of the thermal lens 131 thus cannot be detected. There is thus a problem in that the position of the sample where the thermal lens is formed must be shifted from the focal position 133 of the detecting light every time measurement is carried out as shown in FIG. 5A or 5B, ~~or else~~ to, for example, shift a focal position of the detecting light to a position 134 as shown in FIG. 5A. Alternatively, the detecting light must be diverged or converged slightly using a lens (not shown) before being introduced into the objective lens 130 so that the focal position 133 of the detecting light is shifted from the thermal lens 131 as shown in FIG. 6. ~~;~~ ~~this~~ This requires time and effort, and hence the work efficiency for a user is poor.

Please amend the paragraph at page 14, line 6 to page 15,  
line 6 as follows:

Since it is necessary to make the sample solution flow while maintaining the liquid characteristics thereof, the channel formed in the plate-shaped member used in such an apparatus usually has a depth of approximately 50 to 100 $\mu$ m. If photothermal conversion spectroscopic analysis is carried out with the solution that is the target of measurement flowing through such a channel, then the thickness (depth) of the target of measurement will be much greater than the confocal length of the exciting light. For example, the confocal length in the case of converging exciting light of wavelength 532nm using an objective lens of NA (numerical aperture) 0.4 is 3.9 $\mu$ m, but the thickness of the channel is more than 10 times ~~this~~ as large as the confocal length. Comparing such a case in which the thickness of the target of measurement is greater than the confocal length with the case of a thin film described above, the state will be as if a large number of thin films each having a thermal lens formed therein are piled on top of one another in the

thickness direction, and hence ultimately the effect will be the integral thereof; it is thus anticipated that the optimum value of the shift in the focal position between the exciting light and the detecting light will be larger than in the case of a thin film. However, if the shift in the focal position between the exciting light and the detecting light is too large, then the amount of the detecting light passing through the thermal lens produced by the exciting light will be too low, and hence the detection sensitivity will drop. Regarding the chromatic aberration possessed by the objective lens used in the photothermal conversion spectroscopic analysis method, the shift ( $\Delta L$ ) between the focal position of the exciting light and the focal position of the detecting light is thus preferably in a range of 2 to 30 times, more preferably 2 to 25 times, yet more preferably 3 to 25 times, the confocal length for the exciting light.

Please amend the paragraph at page 15, lines 20-27 as follows:

An example will now be given of how much chromatic aberration can be obtained using a gradient index rod lens. An ~~SLH~~ SML lens as listed in the SELFOC lens catalog of Nippon Sheet Glass Co., Ltd. will be used as the gradient index rod lens. The lens characteristics at a diameter of 1.8mm are listed in the catalog, and hence these will be used converted to characteristic values for a diameter of 1mm.

Please amend the paragraph at page 15, line 28 to page 16, line 8 as follows:

In the case that the channel-formed plate-shaped member is made of Pyrex (registered trademark) glass, the thickness of the portion above the channel (i.e. the thickness of the upper glass 201) is 0.18mm, the depth of the channel is 0.1mm, the diameter of the ~~SLH~~ SML gradient index rod lens is 1mm, the effective diameter for light actually passing through the lens is 0.7mm, the rod length is 1.7mm, the wavelength of the exciting light is 488nm, the wavelength of the detecting light is 633nm, and the focal position of the exciting light is made to be in the very middle of the channel, the shift ( $\Delta L$ ) in the focal position between the exciting light and the detecting light is 45 $\mu$ m. The NA at the focal position in this case is 0.46, and hence the confocal length for the exciting light is 2.7 $\mu$ m.  $\Delta L$  is thus approximately 17 times the confocal length.